

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number
WO 2005/057654 A2

(51) International Patent Classification⁷: **H01L 23/485,**
21/60

PHILIPS ELECTRONICS N. V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(21) International Application Number:
PCT/IB2004/052628

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BEHRENS, Jörg** [DE/DE]; c/o Philips Intellectual Property &, Standards GmbH Weisshausstr. 2, 52066 Aachen (DE).

(22) International Filing Date: 1 December 2004 (01.12.2004)

(74) Agents: **VOLMER, Georg** et al.; Philips Intellectual Property &, Standards GmbH Weisshausstr. 2, 52066 Aachen (DE).

(25) Filing Language: English
(26) Publication Language: English

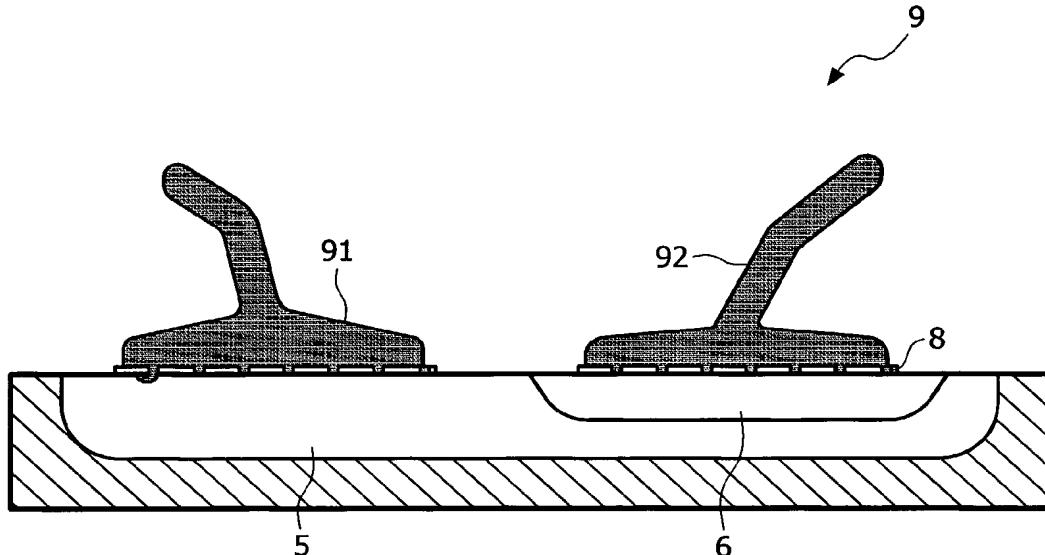
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, SZ, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(30) Priority Data:
03104621.2 10 December 2003 (10.12.2003) EP

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: WIRE-BONDED SEMICONDUCTOR COMPONENT WITH REINFORCED INNER CONNECTION METALLIZATION



WO 2005/057654 A2

(57) Abstract: A semiconductor component comprising a semiconductor chip 2 made of a doped silicon substrate, which chip is doped into a semiconductor device and structured, and comprises an inner connection metallization 7 in a contact window, and said inner connection metallization of said semiconductor chip is connected to the respective outer connection metallization by a wire bond connection 9, characterized in that the inner connection metallization comprises a reinforcing system 8 having an open grid structure on the doped silicon substrate.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*